**July Meeting****Friday, July 15  
7:30 pm**

\*\*\*\*\*

**Dr. Robert Uhrhammer,  
WB6VEX****Our Savior's Lutheran Church  
1035 Carol Lane  
Lafayette, CA**

Dr. Uhrhammer of the Berkley Seismological Laboratory will give a presentation entitled *The Tsunami That Hit the Asian Coast and Can It Happen Here*.

**Field Day On Mount Diablo****By Trevor Hall, WA6JAU**

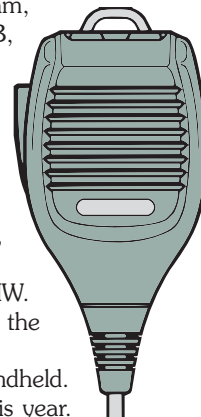
Field day was a fantastic event. We had four stations operating on six bands. The weather on the summit of Mount Diablo could not have been better. Looking out over Contra Costa County at night with the moon shining off the clouds was a real sight to see. I have a lot of people to thank for the success of this event.

Keith Lattin, N6PMF, for pulling the event together. Mark Burnham, KA6FEJ, his wife Cynthia, KG6UJH, and his daughter Emily, KG6WGB, for a great forty meter station. Jim Tittle, K6SOE, for hauling all the equipment to the site and helping set it up and running twenty meters. Lauren, WA6CIE, and Elizabeth Styles, KG6HLV, for their fifteen meter and eighty meter station. Howard Burk, KE6PTT, for tower climbing skills. We also need to thank Paul Girard, KC6TZU, for the fine news article he wrote, and Dick Schultze, AA6DL, for the insurance certificate. Field day requires a lot of assistance from a lot of people, please plan on participating in next years event,

The speaker at the June meeting was Carlos G. Nascimento, NP4IW. He had such a great speech on setting up DXpeditions we extended the meeting by thirty minutes. Thank you Carlos.

The raffle prize at the July meeting is a Yaesu FT60R dual band handheld. We also have a great speaker. We still have openings for speakers this year. If you have or know of a presentation that would be good for the club to hear. Please contact Joe Cusumano, KF6RGH.

Have a great July and send in any stories to the *Carrier* of your summer experiences.

**Inside**

Board Meeting Minutes .....	2
Dave Patterson, KB6UU, SK .....	2
PCSat2 Installation Set .....	3
RACES Training Schedule .....	4
Amateur Radio Deals with Dennis .....	4

**BPL Petition Reconsideration**

NEWINGTON, CT, Jul 12, 2005—The ARRL has cited the conclusions of a UK study and of the FCC itself to further support its call for the Commission to “reconsider, rescind and re-study” the broadband over power line (BPL) rules it adopted last October. In its Petition for Reconsideration last February in the BPL proceeding, ET Docket 04-37, the League argued that in permitting unlicensed Part 15 devices such as BPL, the Commission’s main obligation is to establish a radiated emission level low enough so that the devices “will predictably not interfere” with licensed services.

“Unless this conclusion can be fairly reached, the Commission has no statutory authority to permit the facilities to operate on an unlicensed basis,” the League maintains in a Citation of Additional Authority (Citation) filed July 8. Furthermore, the League says, the FCC itself affirmed the ARRL’s argument in another proceeding.

The League cited a Commission conclusion in last December’s Second Report and Order and Second Memorandum Opinion and Order in the Ultra-Wideband (UWB) proceeding, ET Docket 98-153. The FCC held in its UWB Order that a reasonable reading of Section 301 of the Communications Act would limit licensing to “any apparatus which transmits enough energy to have a significant potential for causing harmful interference.” The FCC, the League asserts in its Citation, cannot authorize BPL—although it’s an unintentional radiator—due to “acknowledged (and field-proven) substantial interference potential to licensed services.” The solution, the ARRL said, is to establish radiated emission limits at a level that would make the chances of interference negligible.

Accompanying the Citation are studies of BPL systems in Scotland conducted by Ofcom, the UK’s telecommunications regulator. These include “Amperion PLT Measurements in Crieff,” “Ascom PLT Measurements in Winchester,” and “DS2 PLT Measurements in Crieff.”

*Continued on page 3*



## Mt. Diablo Amateur Radio Club W6CX

P.O. Box 23222  
Pleasant Hill, CA 94523  
(925) 288-1730

The *Carrier* is a monthly publication of the Mount Diablo Amateur Radio Club (MDARC). It is the policy of the editor to publish all material submitted by the membership provided such material is in good taste, relevant to amateur radio and of interest to MDARC members, and space is available.

All material must be submitted to the editor by the first day of the month of publication. Material is accepted on a first-in, first-out basis. Articles and other material may be submitted via Internet email to [carrier@gardnerclan.net](mailto:carrier@gardnerclan.net) or delivered to the editor at the address listed in the club roster. Material will be accepted in plain ASCII or rich text format (RTF). Material may also be submitted as hardcopy.

All material published in the *Carrier* may be reproduced for non-commercial use provided such use credits both the MDARC *Carrier* and the author of the article. Copyrighted material without accompanying written permission to republish will not be accepted.

The opinions expressed in the *Carrier* are solely those of the editor or other contributors and do not necessarily reflect the opinions of either the Board of Directors or membership of MDARC.

### Club Officers

#### President

Trevor Hall, WA6JAU (925) 680-5209  
[wa6jau@netzero.net](mailto:wa6jau@netzero.net)

#### Vice President

Joe Cusumano, KF6RGH

#### Secretary

Paul Dickey, N6JOX  
[paulr33@earthlink.net](mailto:paulr33@earthlink.net)

#### Treasurer

Dick Schulze, AA6DL  
[rmschulze@earthlink.net](mailto:rmschulze@earthlink.net)

#### Emergency Coordinator

Dana Jones, K6BRR  
[k6brr@stay.com](mailto:k6brr@stay.com)

### Directors

Robert Green, K6GD  
[bobgreen@sbcglobal.net](mailto:bobgreen@sbcglobal.net)

Jay Caldis, KT6Y (925) 939-1893  
[jcaldis@astound.net](mailto:jcaldis@astound.net)

Terry Matzkin, KE6WRE (925) 820-5848  
[lifepro@sprynet.com](mailto:lifepro@sprynet.com)

Dick Brown, KT6X  
[dickjoanne@astound.net](mailto:dickjoanne@astound.net)

### Membership Chairman

Pete Slagle, K6XL  
[mdarc-membership@k6xl.org](mailto:mdarc-membership@k6xl.org)

### Carrier Editor

Jerry Gardner, W6UV (925) 735-7325  
[carrier@gardnerclan.net](mailto:carrier@gardnerclan.net)

### Webmaster

Marvin Miller, WA6GBW (925) 829-3410

### W6CX Repeaters

147.060/+ (100 PL)  
224.780/- (077 PL)  
441.325/+ (100 PL)  
ATV: In 1289.25 Out 427.25, 1241.25

## Board Meeting Minutes

July 5, 2005

President Trevor Hall, WA6JAU, called the meeting to order at 7:02 pm.

Board Members present: Pres. Trevor Hall, Secretary Paul Dickey, N6JOX, Treasurer Dick Schulze, AA6DL, Emergency Coordinator Dana Jones, K6BRR, and Members Jay Caldis, KT6Y, Bob Green, K6GD, and Past President Terry Matzkin, KE6WRE. Other club members and guests: Membership Chairman Pete Slagle, K6XL (7:13), Chief Technician Keith Lattin, N6PMF, and Member Dan Bent, KF6IQL.

The minutes of the June 6 meeting were approved.

Treasurer Dick Schulze reported a balance of \$41,404.89, total of all accounts, without including accrued interest not reported on the cd. The Club is approximately on budget.

President Trevor Hall noted the Club trailer needs an ATV transmit antenna. Dan stated the he would be able to acquire one. Trevor noted that the trailer was very useful during Field Day.

Keith reported the results of bidding on an isolator for the 2m repeater—one was acquired for \$605, and is all set to go.

Pres. Trevor reported that he thanked the Mt. Diablo State Park Ranger. He and Keith noted that thanks should go to others also, especially to Mark Burnham, KA6FEJ, his daughter Emily, KG6WGB, and to Paul Girard for the excellent media exposure.

### Old Business:

- Trevor announced tech nite would be held at the November Club meeting, with Trevor Raty in charge.
- Treas. Dick advised that the State DOJ approved our permit for the raffles. Dick will report to DOJ the applicable instances.
- Keith advised storage locker contract was signed.

### New Business:

- Dan requested permission from the Board to use the Club trailer to participate at the Solano County fair, July 16-17 at the Vallejo fairgrounds. The Board approved the use.
- Dana reminded the Board that a special RACES/ARES site test would take place on July 21.
- Keith noted that a 6/2/440 beam had been given the Club; the trailer rotor needs to be replaced for that use.
- Pete received two new Club memberships.

President Trevor Hall adjourned the meeting at 7:58 pm.

Respectfully submitted, Paul Dickey N6JOX, Secretary.

## Dave Patterson, KB6UU, SK

By Jess Mosher, KI6TB

Dave Patterson, KB6UU, became a Silent Key on April 12, 2005. Dave was a long time supporting member of our club.

He moved to a residential area where HF antennas were prohibited. His Ham activities were limited to contributing and being ever ready to take Net Control on the South County Emergency VHF Net.

Dave was a good friend and a fine gentlemen."



## BPL Reconsideration Petition

*continued from page 1*

Ofcom says concern over signal leakage is one reason for BPL's small UK market share compared with DSL and cable. "Although efficient for their primary purpose, electricity supply cables are not designed, screened or balanced for high frequency use, and in this application they produce significant leakage emissions," the Ofcom study said, adding that the emissions potentially can interfere with radio communication services "including short wave broadcasts."

In its Citation, the ARRL again argues that the FCC "incorrectly rejected" the League's recommendation for a 20 dB extrapolation factor in measuring BPL signal decay on HF based on distance from the signal's source. Instead, the FCC opted to apply the existing--and less stringent--40 dB/decade factor in Part 15.

"The existing Part 15 standard is clearly inapplicable and underestimates the BPL field strength by up to 11.5 dB," the ARRL said, pointing to the Ofcom studies to support its assertion. "The conclusions of these studies," the League noted, "are that 20 dB/decade is appropriate for determining signal decay with distance from the source of the BPL signal, and that the FCC's adopted 40 dB/decade factor is inappropriate."

Additionally, the ARRL said, the Ofcom studies clearly demonstrate "that notching of BPL systems is ineffective as an interference mitigation tool, and that certain BPL systems cannot possibly meet the Commission's Part 15 radiated field strength limits, which are overly liberal with respect to BPL systems in any case."

The League further noted that the FCC itself applies a 20 dB/decade standard to measure signal decay of Part 18 Industrial, Scientific and Medical devices that can operate below 30 MHz. "It is apparent, therefore, that in comparable circumstances, the 20 dB/decade attenuation factor should be applied to BPL systems as a means of determining actual field strength of BPL signals."

In last October's BPL Order, the League pointed out, the FCC stated that if new information became available auguring in favor of alternative emission limit/distance standards or extrapolation factors, it would revisit the issue.

"There is no time like the present," the ARRL concluded.

The League's Citation further supports arguments made in the ARRL's Reply to Oppositions to Petition for Reconsideration last April. Several BPL manufacturers or proponents have argued in the proceeding that the FCC should neither reconsider nor modify the 40 dB/decade distance extrapolation factor when making power measurements of BPL systems.

## PCSat2 Installation Set

NEWINGTON, CT, Jul 12, 2005—When the US space shuttle Discovery launches on its long-awaited "Return to Flight," its crew of seven will include six Amateur Radio licensees. Eileen Collins, KD5EDS, will serve as commander of the STS-114 shuttle mission, now set to go into space Wednesday, July 13, at 1951 UTC--although weather developments could alter that schedule. The launch will mark the first shuttle flight since the loss of shuttle Columbia and its crew--including three Amateur Radio licensees--on February 1, 2003. Collins says she's a "huge believer" in human exploration and also recognizes the risks involved in space travel.

"For me, it's almost a need to explore," she said in a pre-flight interview for NASA. "I like to get out and do new things and see new things. When it comes to flying in space, we're taking very, very small steps. We're flying the space shuttle right now, we're building a space station, we're going to go on from the space station, back to the moon and on to Mars. To me, it is very important for humans to get off the planet and go do these things."

A veteran of three space flights, Collins has logged more than 530 hours in space. She says space travel is "safe enough that I'm willing to take the risk" and significantly safer than the sailing vessels explorers used in past centuries. Discovery is named for two famous sailing ships commanded by explorers Henry Hudson and James Cook.

The other STS-114 crew members are James Kelly, KC5ZSW; Charlie Camarda, KC5ZSY; Wendy Lawrence, KC5KIL; Soichi Noguchi, KD5TVP; Andy Thomas, KD5CHF/VK5MIR, and Stephen Robinson. Thomas and Lawrence both did tours of duty aboard the Russian Mir space station and conducted many SAREX (Space Amateur Radio EXperiment) school group contacts.

During its 12-day mission, Discovery will transport supplies to the International Space Station (ISS), where astronauts will carry out three spacewalks. At this point, it's not clear if any of the licensed STS-114 crew members will have a chance to get on the air from NA1SS, the Amateur Radio station aboard the ISS.

"The crew has been made asked to try and make contacts during their visit, but with all the activities planned, I wouldn't be too optimistic," Amateur Radio on the International Space Station (ARISS) Ham Radio Project Engineer Kenneth Ransom, N5VHO, told ARRL. He notes that ARISS already has had to cancel two school group contacts prior to and during the STS-114 mission time frame because of the intense activity level. "This is likely to be the busiest schedule a shuttle crew has had docked to the space station," he said.

During the third space walk, astronauts will deploy and install PCSat2, an Amateur Radio payload that will be externally mounted on the ISS as a Materials International Space Station Experiment (MISSE). PCSat2 will provide a multi-user PSK31 transponder on 10 meters, an FM voice repeater for possible use with ISS crew communications and an AX.25 packet system for use as a UI digipeater and for telemetry. PCSat2 was constructed by United States Naval Academy midshipmen, in collaboration with the Department of Defense and ARISS under the direction of Bob Bruninga, WB4APR.

The Discovery and ISS crews also will transfer tons of equipment and supplies to and from the ISS. Ransom notes that some ISS experiments have been waiting a long time to come back to Earth. While the NASA crew has been grounded, unmanned Russian Progress rockets have been transporting supplies to the ISS. Crews--reduced from three to two members in the wake of the shuttle tragedy--have been arriving at and departing from the ISS via Russian Soyuz vehicles.

At the launch readiness briefing July 11, NASA Space Shuttle Deputy Program Manager Wayne Hale said it was an exciting time "like Christmas." Shuttle Weather Officer Mindy Chavez says NASA is monitoring an approaching weather system but there are no new weather-related issues. Weather conditions indicate only a 40 percent chance for a launch delay due to weather. NASA has until the end of July to send Discovery on its flight to the ISS. If it doesn't go into space by month's end, it must wait until September to ensure a daylight launch.

## RACES Training Schedule July-September 2005

Date	Location	Subject
July 16		No Scheduled Training
August 20	Driftwood Yacht Club, Oakley	RACES Basic Training
September 17	Martinez Marina Park, Martinez	Potluck & Transmitter Hunt

Be sure to verify the time and place of training on the countywide RACES net on the Thursday evening prior to the event. The countywide net airs at 7:20 PM on 147.735 Central County, 145.410 South County and 145.490 West County.

There are 77 sites throughout Contra Costa County that can be activated in times of an emergency. Thursday, July 21, 2005, will be the "All Sites Activation Net". Please check with your local EC or ADEC if you can volunteer to activate one of these sites. For a list of sites please contact John Pascale nn6e@arrl.net.

The families of the lost shuttle Columbia crew released an expression of support for the Return to Flight mission and its crew. "We have had two and one half years to reflect daily on the loss of our loved ones as the shuttle Columbia (STS-107) broke apart over Texas on February 1, 2003," the families' statement said. "In the aftermath of the Columbia tragedy we saw our nation's space program reinvent itself."

### Amateur Radio Deals with Dennis

NEWINGTON, CT, Jul 11, 2005—Following four days of operation as Hurricane Dennis swept through the Caribbean before making landfall along the US Gulf Coast, the Hurricane Watch Net (HWN) on 14.325 MHz secured operations July 10. HWN Manager Mike Pilgrim, K5MP, said the net worked in concert with WX4NHC at the National Hurricane Center to relay real-time, ground-level weather data from net members to assist NHC forecasters in determining the storm's behavior. He said today, however, that he anticipates it won't be long before the HWN activates once again.

"As we awaken on this sunlit morning in South Florida, it is with a surprised awareness that there is yet another tropical storm on the horizon out in the eastern Caribbean," Pilgrim said. Tropical Depression 5 is still more than 1000 miles east of the Windward Islands, but it's predicted to become a tropical storm this week. "It appears highly probable that the Hurricane Watch Net could be pressed into action again as early as next weekend for what will be called Hurricane Emily," Pilgrim predicted. The net racked up more than 50 hours of activation time for Hurricane Dennis from July 7 until July 10, he said.

Pilgrim thanked all who participated in the HWN-WX4NHC cooperative operation and expressed relief that the storm's impact on the US was somewhat less severe than it could have been with no fatalities reported. Property damage from winds and flooding is still being assessed, however, and could be significant. Before heading toward US shores, Hurricane Dennis left behind a path of death and destruction in Haiti, the Dominican Republic, Jamaica and Cuba.

Amateur Radio Emergency Service (ARES) reports from areas along the US Gulf Coast are still coming in. Northern Florida Section Manager Rudy Hubbard, WA4PUP, rode out the storm at the emergency operations center (EOC) in Santa Rosa County, which includes Pensacola. The Florida Panhandle and the Alabama Gulf Coast appear to have taken the brunt of Dennis, a Category 3 hurricane as it came ashore.

Hubbard said ARES teams in the Panhandle District of Northern Florida have been handling necessary communication assignments and did not need assistance from outside the

section at this point. He praised ARRL West Panhandle District Emergency Coordinator Bobby Tyree, KG4KGX, for "doing an outstanding job in coordinating emergency communications in the four counties he covers."

Hundreds of residents in the Florida Panhandle and elsewhere along the storm's expected landfall point took advantage of Red Cross shelters. Thousands remain without power in the affected area. Dennis hit the region less than a year after a series of devastating hurricanes ravaged Florida last year, and that point was not lost on Northern Florida Section Emergency Coordinator Joe Bushel, W2DWR, who noted that many ARES members were among those still recovering from 2004. "I was thinking about these folks and how much they have put up with in the last year," he said. "All of that and they're still in shelters and EOCs helping others. We do have a choice group of great people, don't we?"



### NEW DUAL BAND 2M/440

- 2 M gain 6.6 dBd (8.5 dBi)
- 440 gain 7 dBd (9.0 dBi)
- 20+ dB front to back ratio
- 24 inch boom length
- Super fast assembly, no instructions needed, screw color coded elements on to color coded boom
- 2 bands-one connector, great for satellite contacts, no duplexer needed, no duplexer cost

**\$74.95** call or fax (925) 933-3242

**Now available at all HRO stores**



# NETS

## W6CX ATV Net

General ATV Net      Thursday 8:00pm  
Net Control: KG6MDW

## Contra Costa County ARES/RACES Nets

Thursday, 7:00pm  
Central County      145.680 Simplex  
Jim Brunk, N6BHX  
East County      146.535 Simplex  
Drew Hanson, KD6GLY  
South County      146.355/+ (100 PL)  
Ed Ritchie, K6SFD  
West County      145.110/-  
Steve Adams, KF6WNH

### ANAHEIM, CA

(Near Disneyland)  
933 N. Euclid St., 92801  
(714) 533-7373  
(800) 854-6046  
Janet, KL7MF, Mgr.  
anaheim@hamradio.com

### BURBANK, CA

2416 W. Victory Bl., 91506  
(818) 842-1786  
(800) 854-6046  
Eric, KA6IHT, Mgr.  
Victory Blvd. at Buena Vista  
1 mi. west I-5  
burbank@hamradio.com

### OAKLAND, CA

2210 Livingston St., 94606  
(510) 534-5757  
(800) 854-6046  
Mark, W17YN, Mgr.  
I-880 at 23rd Ave. ramp  
oakland@hamradio.com

### SAN DIEGO, CA

5375 Kearny Villa Rd., 92123  
(858) 560-4900  
(800) 854-6046  
Tom, KM6K, Mgr.  
Hwy. 163 & Claremont Mesa  
sandiego@hamradio.com

### SUNNYVALE, CA

510 Lawrence Exp. #102  
94085  
(408) 736-9496  
(800) 854-6046  
Howard, KE6PWH, Mgr.  
So. from Hwy. 101  
sunnyvale@hamradio.com

### NEW CASTLE, DE

(Near Philadelphia)  
1509 N. Dupont Hwy., 19720  
(302) 322-7092  
(800) 644-4476  
Jim, KA3LLL, Mgr.  
RT.13 1/4 mi., So. I-295  
newcastle@hamradio.com

### PORTLAND, OR

11705 S.W. Pacific Hwy.  
97223  
(503) 598-0555  
(800) 854-6046  
Leon, N7LXX, Mgr.  
Tigard-99W exit  
from Hwy. 5 & 217  
portland@hamradio.com

### DENVER, CO

8400 E. Iliff Ave. #9, 80231  
(303) 745-7373  
(800) 444-9476  
Joe, KD0GA, Mgr.  
John, N5EHP, Mgr.  
denver@hamradio.com

### PHOENIX, AZ

1939 W. Dunlap Ave., 85021  
(602) 242-3515  
(800) 444-9476  
Gary, N7GJ, Mgr.  
1 mi. east of I-17  
phoenix@hamradio.com

### ATLANTA, GA

6071 Buford Hwy., 30340  
(770) 263-0700  
(800) 444-7927  
Mark, KJ4VO, Mgr.  
Doraville, 1 mi. no. of I-285  
atlanta@hamradio.com

### WOODBIDGE, VA

(Near Washington D.C.)  
14803 Build America Dr. 22191  
(703) 643-1063  
(800) 444-4799  
Steve, N4SR, Mgr.  
Exit 161, I-95, So. to US 1  
woodbridge@hamradio.com

### SALEM, NH

(Near Boston)  
224 N. Broadway, 03079  
(603) 898-3750  
(800) 444-0047  
Chuck, N1UC, Mgr.  
sales@hamradio.com  
Exit 1, I-93;  
28 mi. No. of Boston  
saalem@hamradio.com

## 12 STORE BUYING POWER



# HAM RADIO OUTLET

WORLDWIDE DISTRIBUTION

## KENWOOD



**TS-2000** HF/VHF/UHF TCVR

- 100W HF, 6M, 2M • 50W 70CM
- 10W 1.2 GHz w/optional UT-20 module
- IF Stage DSP • Built-in TNC, DX packet cluster
- Backlit Front Key Panel

**Low Intro Price!**



**TH-D7A(G)** 2M/440

- 2M/440 Dual Band
- Built-in 1200/9600 Baud TNC
- APRS Compatible
- DX Packet Cluster Monitor
- 200 Memos., CTCSS
- VC-H1 Messaging Control

**Low Pricing!**



**TM-D700A** 2M/440 Dualband

- 50w VHF 35w UHF • Opt. Voice Synthesizer
- Receives 118-1300 mHz (cell blocked)
- Remote Head Inst. only (kit included)
- 200 Memories • Built In 1200/9600 baud TNC
- Advanced APRS Features
- Dx Packet Cluster
- Tone Scan • GPS/VC-H1/PC Ports

**COAST TO COAST  
FREE SHIPPING**  
UPS - Most Items Over \$100



**Rapid Deliveries From  
The Store Nearest To You!**

## YAESU



**VX-7R**

- 50/2M/220/440 HT
- Wideband RX
- 900 Memories
- 5W TX (300mw 220Mhz)
- Li-Ion Battery
- Fully Submersible to 3 ft.
- Built-in CTCSS/DCS
- Internet WIREless compatible

**Great Price!**



**FT-100D** HF/6M/2M/70CM Trans.

- Compact Transceiver w/detachable front panel
- Rx 100kHz to 970mHz (cell blocked)
- Tx 100W 160-6M, 50w 2M, 20W 70CM
- Built-in DSP, Vox, CW keyer
- 300 Memories

**Low Pricing!**



**FT-1000MP MKV** HF Trans.

- Enhanced Digital Signal Processing
- Dual RX
- Collins SSB filter built-in
- 200W, External power supply

**Low Pricing!**

### OAKLAND, CA

2210 Livingston St., 94606  
(510) 534-5757  
(800) 854-6046  
Mark, W17YN, Mgr.  
I-880 at 23rd Ave. ramp  
oakland@hamradio.com

### SUNNYVALE, CA

510 Lawrence Exp. #102  
94085  
(408) 736-9496  
(800) 854-6046  
Howard, KE6PWH, Mgr.  
So. from Hwy. 101  
sunnyvale@hamradio.com

## ICOM



**IC-706MkIIg** HF/VHF Transceiver

- All mode HF/6M/2M/70CM
- 100W HF/6M, 50W/2M, 20W/440 Mhz
- AF-DSP • Plug and Play Filters - No Soldering
- Easy-to-Navigate menus

**Low Pricing!**



**IC-756 PRO II** All mode Transceiver

- 160-6M @ 100W • Enhanced Rx performance
- 32 bit IF DSP • SSB/CW Synchronous tuning
- Enhanced 5 inch color TFT w/spectrum scope
- Selectable IF filter shapes for SSB & CW
- Multiple DSP controlled AGC loops
- Advanced CW functions
- 101 alphanumeric memories

**The Ultimate Radio!**

## ALINCO



**DJ-196T** 2M/HT

- 5 Watt out
- 40 memories
- Alphanumeric display
- CTCSS + DCS built in
- "S" meter
- Auto Dialer

**Low Pricing!**



**DR-135TP** 2M mobile

- 50 Watt out • Alpha numeric display
- 100 mems • Built-in TNC 1200 & 9600 Baud
- Front Panel GPS in • Rear DB-9 port
- CTCSS/DCS Encode/Decode built in

**Low Pricing!**

## CALENDAR OF EVENTS

July 5	7:00 pm	MDARC Board Meeting	Carl's Jr. 2280 Oakgrove, Walnut Creek
July 15	7:30 pm	MDARC General Meeting	Our Savior's Lutheran Church
July 31		August Carrier Deadline	
August 1	7:00 pm	MDARC Board Meeting	Carl's Jr. 2280 Oakgrove, Walnut Creek
Thursday Evenings	7:30 pm	MDARC Club Net	147.06 & 441.325 MHz

**The Carrier**  
**Newsletter of the Mt. Diablo Amateur Radio Club**  
**P.O. Box 23222**  
**Pleasant Hill, CA 94523**

PRSRT STD  
U.S. POSTAGE  
PAID  
CONCORD, CA  
PERMIT NO. 460

**Change in Service Requested**

***MDARC General Meeting: July 15<sup>th</sup>***